

5.9.10 Typical Efficacies and Lifetimes of Lamps (1)

<u>Current Technology</u>	<u>Efficacy (lumens/watt)</u>	<u>Typical Rated Lifetime (hours)</u>	<u>CRI (2)</u>
Incandescent	6-24	750-2,000	95+
Torchiere Halogen	2-14	2,000	95+
Tungsten-Halogen	18-33	2,000-4,000	95+
Mercury Vapor	25-50	24,000+	22-52
Fluorescent	50-100	7,500-24,000	49-92
Compact Fluorescent	50-80	10,000-20,000	82-86
Metal-Halide	50-115	6,000-20,000	65-92
High-Pressure Sodium	40-140	16,000-24,000	21-80
Low-Pressure Sodium	120-180	12,000-18,000	0-18

Note(s): 1) Theoretical maximum luminous efficacy of white light is 220 lumens/watt. 2) CRI = Color Rendition Index, which indicates a lamp's ability to show natural colors.

Source(s): Buildings Magazine, Apr. 1995, p. 66 for current technology; Home Energy, Jan./Feb. 1997, p. 13 for torchiere halogen efficacy; and DOE/EE, Advanced Lighting Guidelines: 1993, p. 7-4 for torchiere halogen lifetime and CRI.